10/714,078
Search
Lycook 1/12/07

(FILE 'HOME' ENTERED AT 11:55:10 ON 12 JAN 2007)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 11:55:45 ON 12 JAN 2007

L1	0	S (108 AMINO ACID BNP)
L2	18	S BNP AND (108 AMINO ACID)
L3	7	DUPLICATE REMOVE L2 (11 DUPLICATES REMOVED)
L4	1	S L3 AND ANTIBOD?
L5	0	S BNP AND NESTRITIDE?
L6	11945	S BNP
L7	330	S L6 AND ANTIBOD?
L8	196	DUPLICATE REMOVE L7 (134 DUPLICATES REMOVED)
L9	6	S L8 AND STROKE?
L10	55	S L8 AND PD<2000
L11	40	S L10 AND BRAIN?

ANSWER 30 OF 40 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN

AN 1998012811 EMBASE

TI Biochemical detection of left-ventricular systolic dysfunction.

AU McDonagh T.A.; Robb S.D.; Murdoch D.R.; Morton J.J.; Ford I.; Morrison C.E.; Tunstall-Pedoe H.; McMurray J.J.V.; Dargie H.J.

CS Dr. T.A. McDonagh, Cardiology Department, Western Infirmary, Glasgow G11 6NT, United Kingdom

SO Lancet, (3 Jan 1998) Vol. 351, No. 9095, pp. 9-13. .
Refs: 27
ISSN: 0140-6736 CODEN: LANCAO

CY United Kingdom

DT Journal; Article

FS 006 Internal Medicine
018 Cardiovascular Diseases and Cardiovascular Surgery
029 Clinical Biochemistry
036 Health Policy, Economics and Management

LA English

SL English

ED Entered STN: 22 Jan 1998
Last Updated on STN: 22 Jan 1998

AB Background: In previous studies on the use of natriuretic peptides to detect left-ventricular systolic dysfunction, a higher rate of cardiac disorders in the control groups than in the study groups could have led to bias. We investigated the effectiveness of plasma N-terminal atrial natriuretic peptide (NT-ANP) and brain natriuretic peptide (BNP) concentrations to show left-ventricular systolic dysfunction in a random sample of the general population. Methods: We randomly selected 2000 participants aged 25-74 years from family physicians' lists in Glasgow, UK. We sent all participants questionnaires. 1653 respondents underwent echocardiography and electrocardiography. We took a left-ventricular ejection fraction of 30% or less to show left-ventricular systolic dysfunction. NT-ANP and BNP were measured in plasma by RIAs. Findings: 1252 participants had analysable electrocardiograms and echocardiograms, completed questionnaires, and available blood samples. Median concentrations of NT-ANP and BNP were significantly higher in participants with left-ventricular systolic dysfunction (2.8 ng/mL [IQR 1.8-4.6] and 24.0 pg/mL [18.0-33.0]) than in those without (1.3 ng/mL [0.9-1.8] and 7.7 pg/mL [3.4-13.0]; each $p < 0.001$). Among participants with left-ventricular systolic dysfunction, both symptomatic and asymptomatic subgroups had raised NT-ANP and BNP concentrations. A BNP concentration of 17.9 pg/mL or more gave a sensitivity of 77% and specificity of 87% in all participants, and 92% and 72% in participants aged 55 years or older. Interpretation: Measurement of BNP could be a cost-effective method of screening for left-ventricular systolic dysfunction in the general population, especially if its use were targeted to individuals at high risk.

CT Medical Descriptors:
*heart left ventricle failure: DI, diagnosis
biochemistry
hormone blood level
united kingdom
echocardiography
electrocardiography
heart ejection fraction
radioimmunoassay
questionnaire
cost effectiveness analysis
high risk population
human
male
female
major clinical study
controlled study

aged
adult
clinical trial
randomized controlled trial
article
priority journal
Drug Descriptors:
*brain natriuretic peptide: EC, endogenous compound
*atrial natriuretic factor: EC, endogenous compound
antibody

RN (brain natriuretic peptide) 114471-18-0; (atrial natriuretic factor) 85637-73-6

NP (1) RAS 9129; (2) BNP RIK 9086

CO (2) Peninsula (United States)

aged
adult
clinical trial
randomized controlled trial
article
priority journal
Drug Descriptors:
*brain natriuretic peptide: EC, endogenous compound
*atrial natriuretic factor: EC, endogenous compound
antibody

RN (brain natriuretic peptide) 114471-18-0; (atrial natriuretic factor) 85637-73-6

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L1	0	S (108 AMINO ACID BNP)
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L6	11945	S BNP
L7	330	S L6 AND ANTIBOD?
L8	196	DUPLICATE REMOVE L7 (134 DUPLICATES REMOVED)
L9	6	S L8 AND STROKE?
L10	55	S L8 AND PD<2000
L11	40	S L10 AND BRAIN?

RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(immunoassay with α- brain natriuretic peptide-specific antibody and prepro-BNP/γ- BNP -specific antibody for BNP determination and cardiac diseases diagnosis)

IT 114471-18-0, Brain natriuretic peptide 122007-25-4, Brain natriuretic peptide, prepro-
RL: ANT (Analyte); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(immunoassay with α- brain natriuretic peptide-specific antibody and prepro-BNP/γ- BNP -specific antibody for BNP determination and cardiac diseases diagnosis)

IT 124586-56-7 221266-50-8
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(immunoassay with α- brain natriuretic peptide-specific antibody and prepro-BNP/γ- BNP -specific antibody for BNP determination and cardiac diseases diagnosis)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Anon; FEBS LETTERS 1997, V400(2), P177
(2) Medinnova Sf; WO 9324531 A CAPLUS
(3) Medinnova Sf; JP 07507210 A 1995
(4) Shionogi & Co Ltd; JP 03297392 A 1991 CAPLUS

RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(immunoassay with α- brain natriuretic peptide-specific antibody and prepro-BNP/γ- BNP -specific antibody for BNP determination and cardiac diseases diagnosis)

IT 114471-18-0, Brain natriuretic peptide 122007-25-4, Brain natriuretic peptide, prepro-
RL: ANT (Analyte); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(immunoassay with α- brain natriuretic peptide-specific antibody and prepro-BNP/γ- BNP -specific antibody for BNP determination and cardiac diseases diagnosis)

IT 124586-56-7 221266-50-8
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(immunoassay with α- brain natriuretic peptide-specific antibody and prepro-BNP/γ- BNP -specific antibody for BNP determination and cardiac diseases diagnosis)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Anon; FEBS LETTERS 1997, V400(2), P177
(2) Medinnova Sf; WO 9324531 A CAPLUS
(3) Medinnova Sf; JP 07507210 A 1995
(4) Shionogi & Co Ltd; JP 03297392 A 1991 CAPLUS

	ECLA	G01N033/53; G01N033/74
ES 2256952	IPCI	G01N0033-53 [ICS,4]; G01N0033-68 [ICS,4]
	IPCR	G01N0033-53 [I,C*]; G01N0033-53 [I,A]; G01N0033-74 [I,C*]; G01N0033-74 [I,A]
	ECLA	G01N033/53; G01N033/74
NO 2000001273	IPCI	G01N0033-53 [ICM,7]
	IPCR	G01N0033-53 [I,C*]; G01N0033-53 [I,A]; G01N0033-74 [I,C*]; G01N0033-74 [I,A]
US 2003157596	IPCI	G01N0033-53 [ICM,7]; C07H0021-04 [ICS,7]; C07H0021-00 [ICS,7,C*]; C12P0021-02 [ICS,7]; C12N0005-06 [ICS,7]; C07K0014-47 [ICS,7]; C07K0014-435 [ICS,7,C*]
	IPCR	G01N0033-53 [I,C*]; G01N0033-53 [I,A]; G01N0033-74 [I,C*]; G01N0033-74 [I,A]
	NCL	435/069.100; 435/007.100; 435/320.100; 435/325.000; 530/350.000; 536/023.100
	ECLA	G01N033/53; G01N033/74

AB An immunoassay method specific for mammalian γ- BNP derivs. which comprises using a first antibody reacting with mammalian α- BNP and a second antibody reacting with prepro-BNP or γ- BNP derivs. but not with α- BNP and wherein at least one of these antibodies has been detectably labeled or supported on a solid phase. The immunoassay kit is useful for diagnosis of BNP-associated heart diseases.

ST monoclonal antibody gamma BNP heart disease

IT Blood plasma
Chemiluminescent substances
Fluorescent substances
Heart, disease
Immunoassay
Labels
Mammal (Mammalia)
Particles
Test kits
(immunoassay with α- brain natriuretic peptide-specific antibody and prepro-BNP/γ- BNP -specific antibody for BNP determination and cardiac diseases diagnosis)

IT Enzymes, biological studies
Radionuclides, biological studies
RL: ARU (Analytical role, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(immunoassay with α- brain natriuretic peptide-specific antibody and prepro-BNP/γ- BNP -specific antibody for BNP determination and cardiac diseases diagnosis)

IT Antibodies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunoassay with α- brain natriuretic peptide-specific antibody and prepro-BNP/γ- BNP -specific antibody for BNP determination and cardiac diseases diagnosis)

IT Immunoassay
(immunoradiometric assay, sandwich; immunoassay with α- brain natriuretic peptide-specific antibody and prepro-BNP/γ- BNP-specific antibody for BNP determination and cardiac diseases diagnosis)

IT Antibodies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monoclonal; immunoassay with α- brain natriuretic peptide-specific antibody and prepro-BNP/γ- BNP-specific antibody for BNP determination and cardiac diseases diagnosis)

IT 121128-24-3, γ Brain natriuretic peptide

	ECLA	G01N033/53; G01N033/74
ES 2256952	IPCI	G01N0033-53 [ICS,4]; G01N0033-68 [ICS,4]
	IPCR	G01N0033-53 [I,C*]; G01N0033-53 [I,A]; G01N0033-74 [I,C*]; G01N0033-74 [I,A]
	ECLA	G01N033/53; G01N033/74
NO 2000001273	IPCI	G01N0033-53 [ICM,7]
	IPCR	G01N0033-53 [I,C*]; G01N0033-53 [I,A]; G01N0033-74 [I,C*]; G01N0033-74 [I,A]
US 2003157596	IPCI	G01N0033-53 [ICM,7]; C07H0021-04 [ICS,7]; C07H0021-00 [ICS,7,C*]; C12P0021-02 [ICS,7]; C12N0005-06 [ICS,7]; C07K0014-47 [ICS,7]; C07K0014-435 [ICS,7,C*]
	IPCR	G01N0033-53 [I,C*]; G01N0033-53 [I,A]; G01N0033-74 [I,C*]; G01N0033-74 [I,A]
	NCL	435/069.100; 435/007.100; 435/320.100; 435/325.000; 530/350.000; 536/023.100
	ECLA	G01N033/53; G01N033/74

AB An immunoassay method specific for mammalian γ- BNP derivs. which comprises using a first antibody reacting with mammalian α- BNP and a second antibody reacting with prepro-BNP or γ- BNP derivs. but not with α- BNP and wherein at least one of these antibodies has been detectably labeled or supported on a solid phase. The immunoassay kit is useful for diagnosis of BNP-associated heart diseases.

ST monoclonal antibody gamma BNP heart disease

IT Blood plasma
Chemiluminescent substances
Fluorescent substances
Heart, disease
Immunoassay
Labels
Mammal (Mammalia)
Particles
Test kits
(immunoassay with α- brain natriuretic peptide-specific antibody and prepro-BNP/γ- BNP -specific antibody for BNP determination and cardiac diseases diagnosis)

IT Enzymes, biological studies
Radionuclides, biological studies
RL: ARU (Analytical role, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(immunoassay with α- brain natriuretic peptide-specific antibody and prepro-BNP/γ- BNP -specific antibody for BNP determination and cardiac diseases diagnosis)

IT Antibodies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunoassay with α- brain natriuretic peptide-specific antibody and prepro-BNP/γ- BNP -specific antibody for BNP determination and cardiac diseases diagnosis)

IT Immunoassay
(immunoradiometric assay, sandwich; immunoassay with α- brain natriuretic peptide-specific antibody and prepro-BNP/γ- BNP-specific antibody for BNP determination and cardiac diseases diagnosis)

IT Antibodies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monoclonal; immunoassay with α- brain natriuretic peptide-specific antibody and prepro-BNP/γ- BNP-specific antibody for BNP determination and cardiac diseases diagnosis)

IT 121128-24-3, γ Brain natriuretic peptide

ANSWER 23 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:194337 CAPLUS
DN 130:232845
ED Entered STN: 25 Mar 1999
TI Immunoassay method for brain natriuretic peptide (BNP)
IN Asada, Hidehisa; Shimizu, Hiroyuki; Endou, Kazuaki
PA Shionogi & Co., Ltd., Japan
SO PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
IC ICM G01N033-53
CC 2-1 (Mammalian Hormones)
Section cross-reference(s): 9, 15
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9913331	A1	19990318	WO 1998-JP4063	19980910 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2304263	A1	19990318	CA 1998-2304263	19980910 <--
	AU 9890010	A	19990329	AU 1998-90010	19980910 <--
	AU 731858	B2	20010405		
	EP 1016867	A1	20000705	EP 1998-941797	19980910
	EP 1016867	B1	20060104		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
	JP 3516655	B2	20040405	JP 2000-511064	19980910
	AT 315228	T	20060215	AT 1998-941797	19980910
	ES 2256952	T3	20060716	ES 1998-941797	19980910
	NO 2000001273	A	20000510	NO 2000-1273	20000310
	US 2003157596	A1	20030821	US 2000-508435	20000313
	US 6828107	B2	20041207		
PRAI	JP 1997-246684	A	19970911		
	WO 1998-JP4063	W	19980910		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9913331	ICM	G01N033-53
	IPCI	G01N0033-53 [ICM,6]
	IPCR	G01N0033-53 [I,C*]; G01N0033-53 [I,A]; G01N0033-74 [I,C*]; G01N0033-74 [I,A]
	ECLA	G01N033/53
CA 2304263	IPCI	G01N0033-53 [ICM,7]
	IPCR	G01N0033-53 [I,C*]; G01N0033-53 [I,A]; G01N0033-74 [I,C*]; G01N0033-74 [I,A]
AU 9890010	IPCI	G01N0033-53 [ICM,6]
	IPCR	G01N0033-53 [I,C*]; G01N0033-53 [I,A]; G01N0033-74 [I,C*]; G01N0033-74 [I,A]
EP 1016867	IPCI	G01N0033-53 [I,C]; G01N0033-68 [I,C]; G01N0033-53 [I,A]; G01N0033-68 [I,A]
	IPCR	G01N0033-53 [I,C*]; G01N0033-53 [I,A]; G01N0033-74 [I,C*]; G01N0033-74 [I,A]
	ECLA	G01N033/53; G01N033/74
JP 3516655	IPCI	G01N0033-53 [ICM,7]
AT 315228	IPCI	G01N0033-53 [ICS,7]; G01N0033-68 [ICS,7]
	IPCR	G01N0033-53 [I,C*]; G01N0033-74 [I,C*]; G01N0033-53 [I,A]; G01N0033-74 [I,A]

ANSWER 2 OF 40 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
AN 1999:241472 BIOSIS
DN PREV199900241472
TI An immunoluminometric assay for N-terminal pro-brain natriuretic peptide: Development of a test for left ventricular dysfunction.
AU Hughes, D.; Talwar, S.; Squire, I. B.; Davies, J. E.; Ng, L. L. [Reprint author]
CS Department of Medicine and Therapeutics, Leicester Royal Infirmary, University of Leicester, Robert Kilpatrick Clinical Sciences Building, Leicester, LE2 7LX, UK
SO Clinical Science (London), (April, 1999) Vol. 96, No. 4, pp. 373-380. print.
CODEN: CSCIAE. ISSN: 0143-5221.
DT Article
LA English
ED Entered STN: 17 Jun 1999
Last Updated on STN: 20 Aug 1999
AB Measurement of plasma levels of brain natriuretic peptide (BNP) has been used to assess left ventricular dysfunction and prognosis. Levels of the N-terminus of the precursor of BNP (NT-proBNP) have been reported to be elevated to a greater extent than BNP in left ventricular dysfunction. We have devised a non-radioactive sensitive and specific assay for NT-proBNP based on a competitive ligand binding principle. The chemiluminescent label 4-(2-succinimidyl-oxycarbonylethyl)phenyl-10-methylacridinium 9-carboxylate fluorosulphonate was used to label peptides representing domains in the middle and C-terminal sections of NT-proBNP. Assay of the C-terminal section of NT-proBNP (amino acids 65-76) in patients with proven left ventricular dysfunction (left ventricular wall motion index median 0.9 (range 0.3-1.4)) revealed elevated values (median 639 (386-911) fmol/ml) compared with normal controls (left ventricular wall motion index of 2 in all, NT-proBNP median 159 (120-245) fmol/ml, $P < 0.001$). Measurement of the middle section of NT-proBNP (amino acids 37-49) was not a discriminating test. It is thus possible to derivatize small peptides with a methyl acridinium label and preserve immunodetection with specific antibodies. Such methodology may allow non-radioactive immunoluminometric assays to be devised.
CC Cardiovascular system - General and methods 14501
Biochemistry methods - General 10050
Endocrine - General 17002
Biochemistry studies - General 10060
IT Major Concepts
Cardiovascular System (Transport and Circulation); Methods and Techniques
IT Diseases
left ventricular dysfunction: heart disease
Ventricular Dysfunction, Left (MeSH)
IT Chemicals & Biochemicals
brain natriuretic peptide: plasma; N-terminal-pro-brain natriuretic peptide; 4-(2-succinimidyl-oxycarbonylethyl) phenyl-10-methylacridinium 9-carboxylate fluorosulfonate: chemiluminescent label
IT Methods & Equipment
immunoluminometric assay: diagnostic method
RN 114471-18-0 (brain natriuretic peptide)
87198-89-8 (4-(2-succinimidyl-oxycarbonylethyl) phenyl-10-methylacridinium 9-carboxylate fluorosulfonate)
121128-24-3 (PRO-BRAIN NATRIURETIC PEPTIDE)

ANSWER 5 OF 55 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
AN 1997:510473 BIOSIS
DN PREV199799809676
TI A new, fast and reliable radioimmunoassay of brain natriuretic peptide in human plasma. Reference values in healthy subjects and in patients with different diseases.
AU Jensen, K. T. [Reprint author]; Carstens, J.; Ivarsen, P.; Pedersen, E. B.
CS Res. Lab. Nephrology and Hypertension, Aarhus Univ. Hosp., Aarhus Amtssyygehus, DK-8000 Aarhus C, Denmark
SO Scandinavian Journal of Clinical and Laboratory Investigation, (1997) Vol. 57, No. 6, pp. 529-540.
CODEN: SJCLAY. ISSN: 0036-5513.
DT Article
LA English
ED Entered STN: 10 Dec 1997
Last Updated on STN: 10 Dec 1997

ANSWER 8 OF 55 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

AN 1996:191586 BIOSIS

DN PREV199698747715

TI Preparation of a monoclonal antibody against mouse brain natriuretic peptide (BNP) and tissue distribution of BNP in mice.

AU Nakagawa, Masayo; Tanaka, Issei [Reprint author]; Suga, Shin-Ichi; Ogawa, Yoshihiro; Tamura, Naohisa; Goto, Masahisa; Sugawara, Akira; Yoshimasa, Takaaki; Itoh, Hiroshi; Mukoyama, Masashi; Nakao, Kazuwa

CS Dep. Med. Clinical Sci., Kyoto Univ. Graduate Sch. Med., 54 Shogoin Kawahara-cho, Sakyo-ku, Kyoto 606, Japan

SO Clinical and Experimental Pharmacology and Physiology, (1995) Vol. 22, No. SUPPL. 1, pp. S186-S187.
ISSN: 0305-1870.

DT Article

LA English

ED Entered STN: 2 May 1996
Last Updated on STN: 2 May 1996

ANSWER 16 OF 55 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

AN 1993:429763 BIOSIS

DN PREV199396084388

TI Ventricular expression of brain natriuretic peptide in hypertrophic cardiomyopathy.

AU Hasegawa, Koji; Fujiwara, Hisayoshi [Reprint author]; Doyama, Kiyoshi; Miyamae, Masami; Fujiwara, Takako; Suga, Shinichi; Mukoyama, Masashi; Nakao, Kazuwa; Imura, Hiroo; Sasayama, Shigetake

CS Third Div., Dep. Internal Med., Fac. Med., Kyoto Univ., 54 Kawara-cho Shogoin, Sakyo-ku, Kyoto 606, Japan

SO Circulation, (1993) Vol. 88, No. 2, pp. 372-380.
CODEN: CIRCAZ. ISSN: 0009-7322.

DT Article

LA English

ED Entered STN: 22 Sep 1993
Last Updated on STN: 23 Sep 1993

ANSWER 5 OF 55 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

AN 1997:510473 BIOSIS

DN PREV199799809676

TI A new, fast and reliable radioimmunoassay of brain natriuretic peptide in human plasma. Reference values in healthy subjects and in patients with different diseases.

AU Jensen, K. T. [Reprint author]; Carstens, J.; Ivarsen, P.; Pedersen, E. B.

CS Res. Lab. Nephrology and Hypertension, Aarhus Univ. Hosp., Aarhus Amtssyygehus, DK-8000 Aarhus C, Denmark

SO Scandinavian Journal of Clinical and Laboratory Investigation, (1997) Vol. 57, No. 6, pp. 529-540.
CODEN: SJCLAY. ISSN: 0036-5513.

DT Article

LA English

ED Entered STN: 10 Dec 1997
Last Updated on STN: 10 Dec 1997

10/714,078
updated
LYcook 1/12/07

d his

(FILE 'HOME' ENTERED AT 14:35:33 ON 12 JAN 2007)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 14:35:48 ON 12 JAN 2007

L1 11945 S BNP
L2 1787 S L1 AND HEMO?
L3 49 S L2 AND THROMBO?
L4 29 DUPLICATE REMOVE L3 (20 DUPLICATES REMOVED)
L5 1 S L4 AND ANTIBOD?
L6 28 S L4 NOT L5

ANSWER 12 OF 28 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

AN 1998:89478 BIOSIS

DN PREV199800089478

TI Plasma brain natriuretic peptide levels increase in proportion to the extent to right ventricular dysfunction in pulmonary hypertension.

AU Nagaya, Noritoshi; Nishikimi, Toshio [Reprint author]; Okano, Yoshiaki; Uematsu, Masaaki; Satoh, Toru; Kyotani, Shingo; Kuribayashi, Sachio; Hamada, Seiki; Kakishita, Mikio; Nakanishi, Norifumi; Takamiya, Makoto; Kunieda, Takeyoshi; Matsuo, Hisayuki; Kanagawa, Kenji

CS Dep. Hypertension, Natl. Cardiovasc. Cent., 5-7-1 Fujishirodai, Suita, Osaka 565, Japan

SO Journal of the American College of Cardiology, (Jan., 1998) Vol. 31, No. 1, pp. 202-208. print.
CODEN: JACCDI. ISSN: 0735-1097.

DT Article

LA English

ED Entered STN: 25 Feb 1998
Last Updated on STN: 25 Feb 1998

AB Objectives. This study sought to investigate the influence of right ventricular (RV) hemodynamic variables and function on the secretion of brain natriuretic peptide (BNP) in patients with isolated RV overload. Background. Plasma BNP is known to increase in proportion to the degree of left ventricular (LV) overload. However, whether BNP secretion is also regulated in the presence of RV overload remains unknown. Methods. Plasma BNP and atrial natriuretic peptide (ANP) levels in the pulmonary artery were measured in 44 patients with RV overload: 18 with RV volume overload (RVVO) due to atrial septal defect and 26 with RV pressure overload (RVPO) due to primary or thromboembolic pulmonary hypertension. Right heart catheterization was performed in all patients. RV and LV ejection fraction, myocardial mass and volume of the four chambers were determined by using electron beam computed tomography. Results. Although both plasma BNP and ANP levels were significantly elevated in patients with RV overload compared with values in control subjects, plasma BNP and the BNP/ANP ratio were significantly higher in patients with RVPO than with RVVO (BNP 294 +- 72 vs. 48 +- 14 pg/ml; BNP/ANP 1.6 +- 0.2 vs. 0.8 +- 0.2, both $p < 0.05$). Plasma BNP correlated positively with mean pulmonary artery pressure ($r = 0.73$), total pulmonary resistance ($r = 0.79$), mean right atrial pressure ($r = 0.79$), RV end-diastolic pressure ($r = 0.76$) and RV myocardial mass ($r = 0.71$); it correlated negatively with cardiac output ($r = -0.33$) and RV ejection fraction ($r = -0.71$). Plasma BNP significantly decreased from 315 +- 120 to 144 +- 54 pg/ml with long-term vasodilator therapy (total pulmonary resistance decreased from 23 +- 4 to 15 +- 3 Wood U). Conclusions. Plasma BNP increases in proportion to the extent of RV dysfunction in pulmonary hypertension.

CC Cardiovascular system - General and methods 14501
Pathology - Therapy 12512
Endocrine - General 17002
Pharmacology - General 22002

IT Major Concepts
Cardiovascular Medicine (Human Medicine, Medical Sciences)

IT Diseases
pulmonary hypertension: vascular disease
Hypertension, Pulmonary (MeSH)

IT Chemicals & Biochemicals
atrial natriuretic peptide: secretion, plasma; brain natriuretic peptide: secretion, plasma; vasodilators

IT Miscellaneous Descriptors
cardiac output; mean right atrial pressure; pulmonary artery pressure; right ventricular ejection fraction; right ventricular end-diastolic pressure; right ventricular myocardial mass; right ventricular pressure overload; right ventricular volume overload; total pulmonary resistance

ANSWER 12 OF 28 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

AN 1998:89478 BIOSIS

DN PREV199800089478

TI Plasma brain natriuretic peptide levels increase in proportion to the extent to right ventricular dysfunction in pulmonary hypertension.

AU Nagaya, Noritoshi; Nishikimi, Toshio [Reprint author]; Okano, Yoshiaki; Uematsu, Masaaki; Satoh, Toru; Kyotani, Shingo; Kuribayashi, Sachio; Hamada, Seiki; Kakishita, Mikio; Nakanishi, Norifumi; Takamiya, Makoto; Kunieda, Takeyoshi; Matsuo, Hisayuki; Kanagawa, Kenji

CS Dep. Hypertension, Natl. Cardiovasc. Cent., 5-7-1 Fujishirodai, Suita, Osaka 565, Japan

SO Journal of the American College of Cardiology, (Jan., 1998) Vol. 31, No. 1, pp. 202-208. print.
CODEN: JACCDI. ISSN: 0735-1097.

DT Article

LA English

ED Entered STN: 25 Feb 1998
Last Updated on STN: 25 Feb 1998

AB Objectives. This study sought to investigate the influence of right ventricular (RV) hemodynamic variables and function on the secretion of brain natriuretic peptide (BNP) in patients with isolated RV overload. Background. Plasma BNP is known to increase in proportion to the degree of left ventricular (LV) overload. However, whether BNP secretion is also regulated in the presence of RV overload remains unknown. Methods. Plasma BNP and atrial natriuretic peptide (ANP) levels in the pulmonary artery were measured in 44 patients with RV overload: 18 with RV volume overload (RVVO) due to atrial septal defect and 26 with RV pressure overload (RVPO) due to primary or thromboembolic pulmonary hypertension. Right heart catheterization was performed in all patients. RV and LV ejection fraction, myocardial mass and volume of the four chambers were determined by using electron beam computed tomography. Results. Although both plasma BNP and ANP levels were significantly elevated in patients with RV overload compared with values in control subjects, plasma BNP and the BNP/ANP ratio were significantly higher in patients with RVPO than with RVVO (BNP 294 +- 72 vs. 48 +- 14 pg/ml; BNP/ANP 1.6 +- 0.2 vs. 0.8 +- 0.2, both $p < 0.05$). Plasma BNP correlated positively with mean pulmonary artery pressure ($r = 0.73$), total pulmonary resistance ($r = 0.79$), mean right atrial pressure ($r = 0.79$), RV end-diastolic pressure ($r = 0.76$) and RV myocardial mass ($r = 0.71$); it correlated negatively with cardiac output ($r = -0.33$) and RV ejection fraction ($r = -0.71$). Plasma BNP significantly decreased from 315 +- 120 to 144 +- 54 pg/ml with long-term vasodilator therapy (total pulmonary resistance decreased from 23 +- 4 to 15 +- 3 Wood U). Conclusions. Plasma BNP increases in proportion to the extent of RV dysfunction in pulmonary hypertension.

CC Cardiovascular system - General and methods 14501
Pathology - Therapy 12512
Endocrine - General 17002
Pharmacology - General 22002

IT Major Concepts
Cardiovascular Medicine (Human Medicine, Medical Sciences)

IT Diseases
pulmonary hypertension: vascular disease
Hypertension, Pulmonary (MeSH)

IT Chemicals & Biochemicals
atrial natriuretic peptide: secretion, plasma; brain natriuretic peptide: secretion, plasma; vasodilators

IT Miscellaneous Descriptors
cardiac output; mean right atrial pressure; pulmonary artery pressure; right ventricular ejection fraction; right ventricular end-diastolic pressure; right ventricular myocardial mass; right ventricular pressure overload; right ventricular volume overload; total pulmonary resistance

ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates
RN 85637-73-6 (atrial natriuretic peptide)
114471-18-0 (brain natriuretic peptide)

ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates
RN 85637-73-6 (atrial natriuretic peptide)
114471-18-0 (brain natriuretic peptide)

d his

(FILE 'HOME' ENTERED AT 14:35:33 ON 12 JAN 2007)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 14:35:48 ON 12 JAN 2007

L1 11945 S BNP
L2 1787 S L1 AND HEMO?
L3 49 S L2 AND THROMBO?
L4 29 DUPLICATE REMOVE L3 (20 DUPLICATES REMOVED)
L5 1 S L4 AND ANTIBOD?
L6 28 S L4 NOT L5

ANSWER 2 OF 40 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
AN 1999:241472 BIOSIS
DN PREV199900241472
TI An immunoluminometric assay for N-terminal pro-brain natriuretic peptide: Development of a test for left ventricular dysfunction.
AU Hughes, D.; Talwar, S.; Squire, I. B.; Davies, J. E.; Ng, L. L. [Reprint author]
CS Department of Medicine and Therapeutics, Leicester Royal Infirmary, University of Leicester, Robert Kilpatrick Clinical Sciences Building, Leicester, LE2 7LX, UK
SO Clinical Science (London), (April, 1999) Vol. 96, No. 4, pp. 373-380. print.
CODEN: CSCIAE. ISSN: 0143-5221.
DT Article
LA English
ED Entered STN: 17 Jun 1999
Last Updated on STN: 20 Aug 1999
AB Measurement of plasma levels of brain natriuretic peptide (BNP) has been used to assess left ventricular dysfunction and prognosis. Levels of the N-terminus of the precursor of BNP (NT-proBNP) have been reported to be elevated to a greater extent than BNP in left ventricular dysfunction. We have devised a non-radioactive sensitive and specific assay for NT-proBNP based on a competitive ligand binding principle. The chemiluminescent label 4-(2-succinimidyl-oxycarbonylethyl)phenyl-10-methylacridinium 9-carboxylate fluorosulphonate was used to label peptides representing domains in the middle and C-terminal sections of NT-proBNP. Assay of the C-terminal section of NT-proBNP (amino acids 65-76) in patients with proven left ventricular dysfunction (left ventricular wall motion index median 0.9 (range 0.3-1.4)) revealed elevated values (median 639 (386-911) fmol/ml) compared with normal controls (left ventricular wall motion index of 2 in all, NT-proBNP median 159 (120-245) fmol/ml, $P < 0.001$). Measurement of the middle section of NT-proBNP (amino acids 37-49) was not a discriminating test. It is thus possible to derivatize small peptides with a methyl acridinium label and preserve immunodetection with specific antibodies. Such methodology may allow non-radioactive immunoluminometric assays to be devised.
CC Cardiovascular system - General and methods 14501
Biochemistry methods - General 10050
Endocrine - General 17002
Biochemistry studies - General 10060
IT Major Concepts
Cardiovascular System (Transport and Circulation); Methods and Techniques
IT Diseases
left ventricular dysfunction: heart disease
Ventricular Dysfunction, Left (MeSH)
IT Chemicals & Biochemicals
brain natriuretic peptide: plasma; N-terminal-pro-brain natriuretic peptide; 4-(2-succinimidyl-oxycarbonylethyl) phenyl-10-methylacridinium 9-carboxylate fluorosulfonate: chemiluminescent label
IT Methods & Equipment
immunoluminometric assay: diagnostic method
RN 114471-18-0 (brain natriuretic peptide)
87198-89-8 (4-(2-succinimidyl-oxycarbonylethyl) phenyl-10-methylacridinium 9-carboxylate fluorosulfonate)
121128-24-3 (PRO-BRAIN NATRIURETIC PEPTIDE)

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AN 1998012811 EMBASE

TI Biochemical detection of left-ventricular systolic dysfunction.

AU McDonagh T.A.; Robb S.D.; Murdoch D.R.; Morton J.J.; Ford I.; Morrison C.E.; Tunstall-Pedoe H.; McMurray J.J.V.; Dargie H.J.

CS Dr. T.A. McDonagh, Cardiology Department, Western Infirmary, Glasgow G11 6NT, United Kingdom

SO Lancet, (3 Jan 1998) Vol. 351, No. 9095, pp. 9-13. .
Refs: 27
ISSN: 0140-6736 CODEN: LANCAO

CY United Kingdom

DT Journal; Article

FS 006 Internal Medicine
018 Cardiovascular Diseases and Cardiovascular Surgery
029 Clinical Biochemistry
036 Health Policy, Economics and Management

LA English

SL English

ED Entered STN: 22 Jan 1998
Last Updated on STN: 22 Jan 1998

AB Background: In previous studies on the use of natriuretic peptides to detect left-ventricular systolic dysfunction, a higher rate of cardiac disorders in the control groups than in the study groups could have led to bias. We investigated the effectiveness of plasma N-terminal atrial natriuretic peptide (NT-ANP) and brain natriuretic peptide (BNP) concentrations to show left-ventricular systolic dysfunction in a random sample of the general population. Methods: We randomly selected 2000 participants aged 25-74 years from family physicians' lists in Glasgow, UK. We sent all participants questionnaires. 1653 respondents underwent echocardiography and electrocardiography. We took a left-ventricular ejection fraction of 30% or less to show left-ventricular systolic dysfunction. NT-ANP and BNP were measured in plasma by RIAs. Findings: 1252 participants had analysable electrocardiograms and echocardiograms, completed questionnaires, and available blood samples. Median concentrations of NT-ANP and BNP were significantly higher in participants with left-ventricular systolic dysfunction (2.8 ng/mL [IQR 1.8-4.6] and 24.0 pg/mL [18.0-33.0]) than in those without (1.3 ng/mL [0.9-1.8] and 7.7 pg/mL [3.4-13.0]; each $p < 0.001$). Among participants with left-ventricular systolic dysfunction, both symptomatic and asymptomatic subgroups had raised NT-ANP and BNP concentrations. A BNP concentration of 17.9 pg/mL or more gave a sensitivity of 77% and specificity of 87% in all participants, and 92% and 72% in participants aged 55 years or older. Interpretation: Measurement of BNP could be a cost-effective method of screening for left-ventricular systolic dysfunction in the general population, especially if its use were targeted to individuals at high risk.

CT Medical Descriptors:
*heart left ventricle failure: DI, diagnosis
biochemistry
hormone blood level
united kingdom
echocardiography
electrocardiography
heart ejection fraction
radioimmunoassay
questionnaire
cost effectiveness analysis
high risk population
human
male
female
major clinical study
controlled study

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AN 81094356 EMBASE
DN 1981094356
TI Computerized axial tomography in the detection of brain damage. 2. Epilepsy, migraine, and general medical disorders.
AU Cala L.A.; Mastaglia F.L.
CS Dept. Diagn. Radiol., Sir Charles Gairdner Hosp., Queen Elizabeth Med. Cent., Perth, Australia
SO Medical Journal of Australia, (1980) Vol. 2, No. 11, pp. 616-620. . CODEN: MJAUAJ
CY Australia
DT Journal
FS 014 Radiology
008 Neurology and Neurosurgery
027 Biophysics, Bioengineering and Medical Instrumentation
050 Epilepsy
LA English
ED Entered STN: 9 Dec 1991
Last Updated on STN: 9 Dec 1991
AB The cranial computerized axial tomography (CAT) findings in groups of patients with epilepsy, migraine, hypertension, and other general medical disorders have been reviewed to assess the frequency and patterns of focal and diffuse brain damage. In addition to demonstrating focal lesions in a proportion of patients with seizures and in patients presenting with a stroke, the CAT scan showed a premature degree of cerebral atrophy in an appreciable proportion of patients with long-standing epilepsy, hypertension and diabetes, and in some patients with migraine, valvular and ischaemic heart disease, chronic obstructive airways disease, and chronic renal failure. The value of CAT as a means of screening for brain damage in groups of individuals at risk is discussed.
CT Medical Descriptors:
*brain atrophy
*computer assisted tomography
*epilepsy
*hydrocephalus
*hypertension
*migraine
central nervous system
diagnosis
major clinical study
computer analysis
cardiovascular system